


# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>AS01P001WO</b>		<b>FOR FURTHER ACTION</b>		See Form PCT/PEAA416
International application No. <b>PCT/EP2004/009362</b>		International filing date (day/month/year) <b>20.08.2004</b>	Priority date (day/month/year) <b>20.08.2003</b>	
International Patent Classification (IPC) or national classification and IPC <b>H04Q7/22, H04M3/493, H04M1/247, H04M17/00</b>				
Applicant <b>ACCENTURE GLOBAL SERVICES GMBH et al</b>				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 4 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  <b>08.06.2005</b>		Date of completion of this report  <b>14.12.2005</b>		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  <b>Kanlis, A</b>  Telephone No. +49 89 2399-6028		



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# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/EP2004/009362

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
    - ☐ international search (under Rules 12.3 and 23.1(b))
    - ☐ publication of the international application (under Rule 12.4)
    - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

### Description, Pages

1, 2, 4-15 as originally filed  
3, 16 received on 24.11.2005 with letter of 24.11.2005

### Claims, Numbers

1-9 received on 24.11.2005 with letter of 24.11.2005

### Drawings, Sheets

1/7-7/7 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☒ The amendments have resulted in the cancellation of:
  - ☐ the description, pages
  - ☒ the claims, Nos. 10-26
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/009362

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-9
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/EP2004/009362

**Re Item V**

The following documents are referred to in this communication:

- D1: EP 1262931 A  
D2: EP 1039768 A  
D3: WO 01/03456 A  
D4: WO 01/72001 A

Document D1, regarded as being the closest prior art to the subject matter of independent **claim 9**, discloses (the references in parenthesis applying to that document) a mobile terminal (see figure 1, reference sign 100 and figure 2, reference sign 200), comprising a display screen (see figure 2, reference sign 220), an input system for receiving user input (see figure 1, reference sign 102 and figure 2, reference sign 222), a wireless communications subsystem (see figure 2, reference sign 216 and column 10, lines 41 and 42), a processor (see figure 1, reference sign 104) and memory (see column 9, lines 51-57) for storing computer executable instructions, the mobile terminal being adapted to:

- (i) load a local client executable application for decoding a coded short text messaging system message (see column 9, lines 13-15 and 47-51);
- (ii) receive the coded short text messaging system message via the wireless communication subsystem (see column 6, lines 20-22 and column 9, lines 47-51), wherein the coded short text messaging system message comprises compressed data (see, e.g., column 2, lines 26-53); and
- (iii) decode the received short text messaging system message (see column 9, lines 47-51) using a set of short codes (see column 3, lines 13-21 and column 4, lines 3-22) to be translated into human understandable format (see column 6, lines 22-26) and administrative commands used for instructing the application, e.g., to update the code book (see column 8, lines 27-31 and column 10, lines 42-48) and to select the code book to be used (see column 11, lines 27-29).

Document D1 further discloses that the local client executable application is configured to use a plurality of code books, which may share part or all of their contents with one another or be mutually exclusive and incompatible (see column 11, lines 12-17). Hence, the "first or second local client executable application" defined in step (i) of claim 9 correspond to instances of the

local client executable application of document D1, when using a first and a second code book. Furthermore, the "short codes unique to the first or second application to be translated into human understandable format" defined in step (iii) of claim 9 correspond to the case of the first and the second code books being mutually exclusive. Finally, it is obvious that the administrative commands used for code book update and selection in the local client executable application of document D1 have to be "consistent for the first and second application" (in the sense that these represent instances of the same application using two different code books), since these operations are independent of the contents of the first and second code books.

It is, therefore, evident that the only difference between the subject matter of claim 9 and the disclosure of document D1 is that document D1 does not explicitly disclose that the common administrative commands are provided in the form of short codes (the term "short codes" being interpreted, in the light of the described embodiment, see paragraphs [41]-[43] of the description of the present application, as short text strings). Nevertheless, since the administrative commands of document D1 are embedded in text messages (see, e.g., column 1, lines 22-24), the implementation of the administrative commands in the form of short text strings would be one of the straightforward possibilities that a skilled person would consider, without the exercise of inventive skill. A further motivation for the use of short text strings as administrative commands, is also provided by document D4, which discloses a mobile terminal (see figure 2, reference sign 20) with a client application (see page 7, lines 11-14 and figure 2, reference sign 66) for receiving and decoding formatted messages (see page 7, lines 14-21), as well as for recovering and executing commands embedded in the received messages (see page 8, lines 15-22), the commands being in the form of short text strings (see page 16, line 26-page 17, line 21).

As a consequence, the skilled person, based on the disclosure of document D4, would consider it a normal design option to use administrative commands in the form of "short codes" and would appropriately modify the mobile terminal of document D1 to arrive at the definition of present claim 9. Hence, the subject matter of claim 9 does not involve an inventive step in the sense of Article 33(3) PCT and, therefore, claim 9 does not meet the criteria of Article 33(1) PCT.

Independent method **claim 1** corresponds to apparatus claim 9, whereby the features have

been reformulated to define method steps. Since the apparatus is deemed to be rendered obvious by the disclosure of documents D1 and D4, the associated method does not involve an inventive step in the sense of Article 33(3) PCT either and claim 1 does not meet the criteria of Article 33(1) PCT.

Dependent claims 2-8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Articles 33(1) and (3) PCT):

- claim 2:** Flashing the memory of the terminal in response to a received command is merely one of the several operations that a skilled person would map to the administrative codes of documents D1 and D4 without the exercise of inventive skill.
- claim 3:** The short codes of document D1 identify individual fields of data (see, e.g., claim 18).
- claim 4:** Adaptation to the language of the user is also considered in document D1 (see column 11, lines 21-29).
- claim 5:** Transmission and reception of graphical information using SMS messages is well known (see, e.g., document D2, column 6, lines 9-20; column 8, line 26-column 9, line 58; column 14, line 2-column 15, line 57, as well as document D4, page 9, lines 26-29 and page 11, lines 7-12).
- claims 6,8:** Executable code and Java are normal selections for writing an application, that the skilled person would certainly consider, as also recognised on page 9, paragraph [38] of the description of the current application.
- claim 7:** The messages in document D1 may also be SMS messages (see column 1, lines 22-24).

1. A method for distributing selected information to a user of a mobile terminal (201), the terminal (201) comprising a display screen, an input system (307) for receiving user input, a wireless communications subsystem, a processor (301), and memory (311); the method comprising:
  - (i) loading a first or a second local client executable application (315) for decoding a coded short text messaging system message;
  - (ii) receiving the coded short text messaging system message via the wireless communications subsystem, wherein the coded short text messaging system message comprises compressed data;
  - (iii) the first or second local client executable application (315) decoding the received short text messaging system message using a set of short codes that comprises short codes unique to the first or second application to be translated into human understandable format and administrative short codes consistent for the first and second applications used for instructing the first or second application.
2. The method of claim 1, wherein instructing the first or second application comprises instructing the first or second application to flush its memory.
3. The method of claim 1, wherein the short code identify individual fields of data.
4. The method of claim 1, wherein the human understandable format comprises text in a native language of the user of the mobile terminal (201).
5. The method of claim 1, wherein the human understandable format comprises graphics.
6. The method of claim 1, wherein the first or second local client executable application (315) comprises executable code.
7. The method of claim 1, wherein the short text messaging system comprises SMS.
8. The method of claim 6, wherein the executable code comprises Java.

9. A mobile terminal (201), comprising:
- a display screen;
  - an input system (307) for receiving user input;
  - a wireless communications subsystem;
  - a processor (301);
  - memory (311) on which computer executable instructions to be executed by the processor (301) are stored, such that the mobile terminal (201) is adapted to:
- (i) load a first or a second local client executable application (315) for decoding a coded short text messaging system message;
  - (ii) receive the coded short text messaging system message via the wireless communications subsystem, wherein the coded short text messaging system message comprises compressed data;
  - (iii) decoding the received short text messaging system message using a set of short codes that comprises short codes unique to the first or second application to be translated into human understandable format and administrative short codes consistent for the first and second applications used for instructing the first or second application.



[09] The document EP 1 262 931 A shows a mobile terminal adapted to load a local client executable application, receiving messages, decoding them and displaying them. The local client executable application is configured to use a plurality of code books and can also retrieve administrative commands.

The WO 01/03456 A shows a method of transmitting data items from a service provider through at least one base station to a large number of mobile stations, the mobile stations comprising a storage module for storing data items, and a display for presenting data items to a user.

In the EP 1 039 768 A there is described a digital mobile station configured to load an application for decoding SMS messages. The received message may be decoded into graphic data, and displayed on a display.

[10] It would be an advancement in the art to provide a method for distributing selected information to a user of a mobile terminal, and a mobile terminal with which the amount of memory space needed for storing short codes might be reduced.

The above and other objects are solved by a method according to claim 1, and a mobile terminal according to claim 9.

[11] To overcome limitations in the prior art described above, and to overcome other limitations that will be apparent upon reading and understanding the present specification, there is provided an information distribution system that may be used on a mass scale to provide information to a highly concentrated or localized mass of mobile terminals attempting to communicate from the same or near same locations, e. g. , through one or two neighboring base stations.

[12] According to an embodiment there is provided a mobile terminal with a resident client application that can encode and decode messages received from one or more content providers. The client application, upon decoding a received message, can display the decoded information in a human-understandable format on the mobile terminal's display screen.

[13] Another embodiment provides a client application that can be installed on a mobile terminal to encode and decode messages received from one or more content providers. The client application, upon decoding a received message, can display the decoded information in a human-understandable format on the mobile terminal's display screen. A user of the client application can request that information updates from the content provider be provided only on-request by the user ('pull' mode of operation) or the user can prepay for updates and specify the criteria by which updates should be sent automatically to the user's mobile terminal ('push' mode of operation).

processors execute one or more of the software modules, the software modules interact to cause one or more computer systems to perform according to the teachings of the present invention.

[59] Using one or more aspects of the above-described invention, information can be distributed to users on a mass scale using only limited bandwidth per user. In addition, by using SMS or other connectionless communications systems, an asynchronous or otherwise noncontinuous connection with the Internet or other data network may be used to distribute the information, resulting in reduced overhead per message. Furthermore, SMS has a built in security layer that various aspects of the invention can take advantage of to ensure security and privacy to end-users. In addition to compression of messages using the short codes and/or other compression techniques, data can also be encrypted to provide an additional layer of security in addition to that provided inherently by SMS services.

[60] While the invention has been described with respect to specific examples including presently preferred modes of carrying out the invention, e. g. , using standardized SMS messages, those skilled in the art will appreciate that there are numerous variations and permutations of the above described systems and techniques. Any other short text messaging system that provides similar functions as SMS could alternatively be used.